

Question 1 (Short answer)

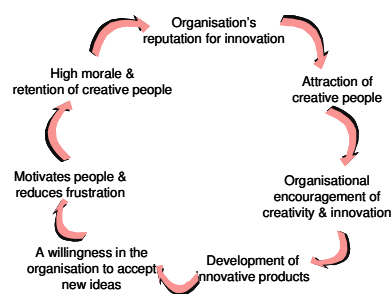
Suggest **four** ways in which an organisation might encourage its people to generate new ideas and innovate. Give examples from companies or organisations of your choice to illustrate your points. (4 marks) Briefly explain how organisational encouragement of new ideas results in a 'virtuous circle of innovation' (Trott). (4 marks)

Key Points:

- Encouraging new ideas & innovation embedded in the organisation's culture where proposals are welcomed, there is acceptance of risk and tolerance of failure (e.g. J&J, Dell).
- Formal new ideas schemes, possibly backed up by financial incentives if adopted (e.g. Toyota, Kodak).
- Idea generation sessions, e.g. Honda's 'brainstorming camps', uWink 'compost sessions'.
- Employees given autonomy and freedom to pursue their own new ideas (e.g. 3M, UCL).

Other good ideas accepted, but must draw organisational culture inference to score fully.

Virtuous circle of innovation:



Students do not have to draw the diagram, but do need to explain the key points:

The encouragement of new ideas & innovation results in more innovative products, which increases internal acceptance of new ideas (i.e. from success) and enhances the organisation's reputation for innovation. A reputation for innovation and a culture which welcomes new ideas and innovation enables the organisation to attract and retain creative people.

Question 2 (Short answer)

*Outline the key components of the Technical strand of an organisation. (4 marks).
Briefly explain why adjustments to the Technical strand alone often fail to bring about enduring change in an organisation. (4 marks)*

Technical strand:

Students to provide a brief description of the following:

- Hierarchy & structure.
- Roles & responsibilities.
- Rules & incentives.

Technical strand & change:

The technical strand can be designed or (engineered) to function in a particular way, where the structure and relationships between positions is adjusted, tuned or twisted to achieve optimum results. This views the organisation as a technical instrument (a machine) for mobilising human energies. However, people are not robots (machines) and in times of change (where they may feel under threat) political activity intensifies (preserve own interests) and cultural resistance is heightened. Changes to the Technical strand alone do not change behaviour – politics and culture far more powerful in determining whether change will succeed, or not (e.g. AEP case that was discussed in class).

All good answers along these lines – which recognise the limits of Technical strand change alone and the power of politics and culture to subvert change accepted.

Question 3 (Short answer)

Outline the principal differences between qualitative and quantitative data. Your answer should be in the form of written statements and not a list (5 marks). Give an example of a market research problem in new product development where qualitative data is likely to be more useful than quantitative. (3 marks)

Principal differences:

Statements should be along the lines of:

Quantitative data is concerned with numerical measurement, and findings are aggregated (generally by computer) and then analysed and compared based on statistics. It usually involves a questionnaire with pre-determined answers where respondents select from the options. It provides breadth and will tell you the 'what', although it may not tell the full 'why' as response options are pre-determined by the researcher. It is useful for collecting large amounts of data from a statistically representative number of respondents in the target population.

Qualitative data is concerned with finding out attitudes, opinions and motivations - it adds the 'why' to the 'what' of quantitative. Questions do not have pre-determined answers; the respondents state their views, feelings etc. in their own words. As there is no pre-imposed structure, results are not added up and analysed statistically but are interpreted. The person conducting the qualitative research therefore has to be skilled in a way that the collector of quantitative data (ie the questioner on the street corner) is not. However, it is too expensive and time-consuming to collect qualitative data from large numbers of people, and this method is best used to collect information in depth from a relatively small number of people.

Example of qualitative research

Qualitative research is used to probe deeper understanding of attitudes towards a product. An example of this would be a focus group which gets together to discuss the positioning of a new product such as a soft drink targeted at the 20-30s age group. Members of the target age group will be drawn together for a couple of hours and their views on the product as compared to its competitors will be probed eg what does it make them feel like when testing it, does it seem more/less sophisticated than the others in the same price bracket etc. Often it will not be clear to those participating in the group which brand is the client's and which is the competitor's.

Similar answers showing how qualitative research probes attitudes, rather than simply hard numbers, will be accepted.

Question 4 (Long answer)

You are a sales person in an electronics company. At a recent trade exhibition you met a supplier that was willing to supply your company with a product on an exclusive basis (i.e. available to your company only) that you could offer in your market-place. The product in question has already been successfully developed and tested and – as yet – is not being sold on the market. You know from speaking to your customers that there is demand for such a product and it would clearly plug a gap in your company’s product portfolio, and give your company significant competitive advantage.

You approach the product management division with your idea and, to your surprise, they are very unenthusiastic and reject your idea, stating “We always develop our own products in-house in this department – it would cost the company far too much to set up the processes to buy in a product from outside”.

Outline the possible range of reasons for the product management division’s rejection of your idea. (4 marks)

What might you do or argue to persuade or otherwise ensure that your idea is adopted? (12 marks)

State which of your options in (b) would be your preferred approach, and why. (4 marks)

Key Points:

- It might be that there are genuine practical (rational) reasons why the idea is not feasible, e.g. there are no systems and processes in place to manage a procurement of this nature, and these would be very costly and disruptive to put in place – perhaps at the expense of managing current products and developments.
- Resistance might also be political / cultural – e.g. not invented here, resistance to change in ways of working, inter-departmental conflict (product managers distrust salespeople), departmental self-interest because internal power base stems from in-house NPD activities & its importance in the organisation. However, reasons overtly stated will be ‘rational’ (e.g. as noted in previous bullet point).

Strategies to gain support:

First of all, need to ascertain whether resistance is purely rational or whether there are elements of political:

- Speak to product management division in more depth to try to understand the problems.
- Speak to others in the organisation (e.g. contracts, IT, finance) to ascertain how costly and potentially disruptive any new processes might be.

Clearly, the support of the product management division is needed for the product to be introduced successfully. Need to ‘sell’ the benefits to them, and try to negotiate a Win/Win.

- Sell / explain to them the significant competitive advantage that would accrue to the organisation (and the product management division) from adopting the new product. (A sales person you shouldn’t find this too difficult!)

- Demonstrate that the financial investment in the new processes is worthwhile, and might also lead to scope for them to expand their ranges in this way in the future.
- Kudos to the product management division from introducing the new idea and increasing the firm's market share and profits (share the credit).
- Need to convince them that the product is complementary and doesn't cannibalise existing products nor detract from in-house NPD projects. Buying-in is the only feasible way to acquire this product, with no downsides to existing NPD activities.
- Demonstrate the downsides of not going ahead – e.g. a competitor buys the product and increases its market power.
- 'Selling' may involve views of others in the organisation who might have a stake in the new processes (e.g. contracts department, finance etc.) – who might be able to convince product management of its feasibility.
- Prepare a cost / benefit analysis to persuade them of the advantages.
- Involve them in the preparation of a final business case (proposal) to go-ahead. If they are convinced of the benefits, then they might even wish to take the lead and pursue the proposal etc. themselves. (but be careful that they don't just agree to take the lead in order to 'bury' the idea so that it never sees light of day).

Alternatively, could use power to force:

- If the sales department has the power to force them to implement the idea through, e.g. senior management edict; sales apply pressure via another product that product management need sales support for.
- Subvert them - get another department to implement the necessary processes (e.g. contracts), to force product management to then take on the new product.

Preferred option:

- Sell or persuade, as you will need product management's co-operation for the product to be successful in the longer term.
- If forced, it is likely they may find other ways to block the innovation, ensure it doesn't work successfully (using very 'rational' reasons as to why this cannot be the current priority).
- Also, you may need their co-operation / goodwill for something else in the future – and this is unlikely to be forthcoming if they are forced on this issue.

All good ideas accepted in all parts, but students should opt for persuasion / negotiation as the preferred strategy. Arguments for 'Forcing' may gain some credit, but need to justify why preferable to Win/Win to score fully.

Question 5 (Long answer)

You work as a consultant. Your current assignment is to advise a large, traditional manufacturing firm whose products are facing obsolescence. Your initial audit of the company highlights a failure to innovate over many years.

Briefly outline the reasons why large organisations often struggle to innovate. (5 marks). You have been asked to prepare a presentation to the manufacturing company's senior management suggesting ways in which the company could become more innovative. Provide a report which explains the points that you would cover in your presentation. Your report should be in continuous prose, using a report format (headed paragraphs). (15 marks)

Why large organisations struggle to innovate

Students to provide a brief outline of the following reasons. Other good points accepted.

Large companies often struggle to innovate because of the constraints which their sheer size places upon their modus operandi. The following are some reasons why large companies may struggle with innovation.

- **Institutionalised risk aversion and tendency to conform** – in a large organisation it is often “safer” to do as others do rather than to stick your neck out with a new idea. Reward structures are often skewed to favour – for the individual – continuation of the status quo rather than departing down a new untested –albeit potentially innovative- track
- **Short time horizons** – the stockmarket puts large quoted stocks under the microscope. The expectations are for these companies to keep churning out positive growth in sales and profits every quarter. This can mean that management respond by having a short term rather than a long term focus.
- **NPD via NPV** – the internal procedures of most large companies require “objective” analyses of NPD to be done such as a net present value calculation. These methods can allow good ideas to be buried by those making the calculations, by loading negative/risky assumptions into the calculation
- **Excessive bureaucracy** – large organisations tend to be burdened with intricate procedures for decision making. This does not encourage rapid decision making which is often a key factor in true innovation
- **Distance of top management** – in small organisations management keep close to customers and tend to be attuned to their demands. However, in larger organisations they can be too far removed from the “sharp edge” to realise what adjustments to products (or indeed the next big thing) needs to be.

Ways in which the company could become more innovative

Your company could become significantly more innovative than it currently is, through implementation of some of the following changes. I appreciate that these changes are not necessarily easy or quick to implement, but their adoption could make a significant difference to the innovativeness of the company.

My recommendation is that you focus on the following areas:

- **Distance of top management** – there is a perception that the top management are too far from the “cutting edge” of the business. The everyday realities of the business are not clear to you and there is an imperative that you get back to the shop floor to understand better the processes and the customers. It will then be apparent to you that innovation is critical for your business to continue without further erosion of market share.
- **Involvement of top management in innovation** – there is no one in the senior team championing new product ideas. The staff therefore perceive – rightly – that innovation is not a priority within the organisation. There must be more visible involvement from senior management eg directors should head up NPD committees in a high profile fashion, laying out clear NPD strategies and parameters.
- **Multifunctional teams**– the new product development team needs to draw upon a wider variety of functions. Simply having the process conducted by R&D is not sufficient. You need to draw upon talent in the rest of the organisation and bring marketing, manufacturing into the fold. Early input from finance and indeed top management (see above) would also be required
- **Skunkworks** – you may want to go further than simply having multi-functional teams. You may want to really enhance the innovation-process by setting up skunkworks These are small teams of engineers, technicians, designers and marketeers put into one room without any bureaucracy or physical barriers. They are given a clear goal but left to decide how they get there. This method tends to inspire people’s creativity and has been used to great effect at, for example, Apple
- **Flatter organisation** – we appreciate that there is a need for some hierarchy within the organisation, but the levels of decision making that need to be gone through are obstructing the flow of useful ideas. Eliminating a layer within the management structure would improve this flow in terms of speed and also in allowing good ideas to find their way up to the key decision-makers instead of being eliminated at an early stage
- **Market orientation** – a greater emphasis on understanding your customers is needed. This should not simply be left to the salesforce. If all areas had some sense of what the customer values then it would be easier for all your products and indeed new approaches to be more likely to get a good reception in the marketplace. This would increase the success of your innovations.

- **Tolerance of failure** – the attitude toward innovation is very harsh within the company. Those who undertake it but fail at one of the many hurdles are stigmatised and their bonuses are affected. This discourages staff from sticking their necks out. This culture needs to be addressed urgently. Unless the risks of NPD are accepted, there will never be a spirit of innovation in the company.
- **Multiple approaches** – You may wish to consider simultaneous approaches to developing a new product, putting rival teams onto the issue. This has the advantage of reducing development time and therefore improving the probability of success, but it has to be sensitively handled when one team “beats” the other. If not this approach could create an adversarial climate of “winners” and “losers”.
- **Learning: individual and institutional** – Incorporating “lessons learned” from innovation projects is something which needs to be improved. You tend to waste a great deal of resource in reinventing wheels. It should be recognised that even when an NPD project has not resulted in a successful end-product, there may have been a great deal of valuable information and, more importantly, knowledge, gathered along the way.

Other good arguments for improving the large organisation’s creativity would also be accepted.